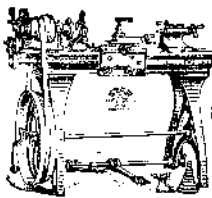
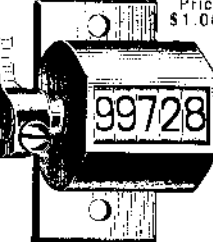


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these articles are all luxuries, it is quite possible for the ordinary amateur woodworker to construct them at home in his workshop. The book is by the sometime editor of "Amateur Work," and the directions given in it are altogether practical, while the designs shown are original.

HINTS TO YOUNG YACHT SKIPPER. By Thomas Fleming Day. New York and London: The Rudder Publishing Company, 1904. 18mo.; pp. 122. Price, \$1.

Mr. Day, than whom there is no more charming and altogether captivating writer on yachts and yachting, has given the public another of his useful Rudder On Series, and like all its predecessors it is practical, compact, and entertaining. These Hints to Young Skippers are answers to just the very kind of questions that the amateur yachtsman wants to know. The book is small enough to be carried in the pocket, or stowed away in the locker or rack with the limited printed matter, in the way of charts, tidal and weather information, which even the smallest knockabout that goes a-cruising carries. The illustrations are half-tones of drawings by Warren Sheppard, and they show the position of the sails and the proper method of handling them on the various points of sailing or under the many critical conditions that arise when on a cruise.

THE FAN. Including the Theory and Practice of Centrifugal and Axial Fans. By Charles H. Innes, M.A. New York: The Van Nostrand Company, 1904. 12mo.; pp. 252; 142 diagrams and illustrations. Price, \$2.50.

This book, by the author of "Centrifugal Pumps, Turbines, and Water Motors," is written with the idea that the same theory used in the construction of centrifugal pumps can be applied to fans and blowers. That this is so is shown by numerous experiments described by the author. The book opens with chapters descriptive of the theory of the centrifugal fan, which are followed by experiments and descriptions of various fans or blowers of this type. In the latter part of the book a description is given of Prof. Rateau's high-pressure screw fans, and the theory of these fans is also stated. The theory which governs propeller fans is also discussed. Among the topics treated in the work are chapters on the design of various types of fans and experiments illustrating the action of such types; the variation of pressure in centrifugal fans; and the theory which governs the propeller ventilating fans.

A TREATISE ON THE THEORY OF ALTERNATING CURRENTS. By Alexander Russel, M.A., M.I.E.E. New York: The Macmillan Company, 1904. 8vo.; pp. 407. Price, \$5.

This volume is the first of this new work on the theory of alternating currents. In it the more general theorems are collected and proofs are given of the more important of them, due notice being taken of the assumptions that it is sometimes necessary to make. The first part of the book deals with inductance and capacity, and the formulae there given should be helpful to all practical electricians. In Chapter V. illustrations are given of the methods for calculating the capacities of polyphase cables and overhead wires, and the method of finding the inductances of these combinations of conductors in the case of surface currents is also described. In Chapter IX. the test-room methods of measuring power are given, and when discussing practical problems the author describes the method of replacing an air-core transformer by its equivalent network. Some of the problems in two-phase theory are discussed and how the theorems of solid geometry can be usefully applied to them is shown. The main problems in the theory of phase indicator and induction type watt-hour meters are stated and approximate solutions are given. The theory of rotating magnetic fields is also described as well as the interesting problem of the nature of the magnetic field around parallel wires carrying polyphase currents. Most helpful to the practical worker will be found the approximate solutions of the problem of the eddy currents in magnetic metals. The book is very complete and will be found useful to both the student and the practical man.

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March 7, 1905

AND EACH BEARING THAT DATE
[See note at end of list about copies of these patents.]

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Agar-agar and product of same, manufacturing limpid solutions of, W. Riebensahm.....	784,349
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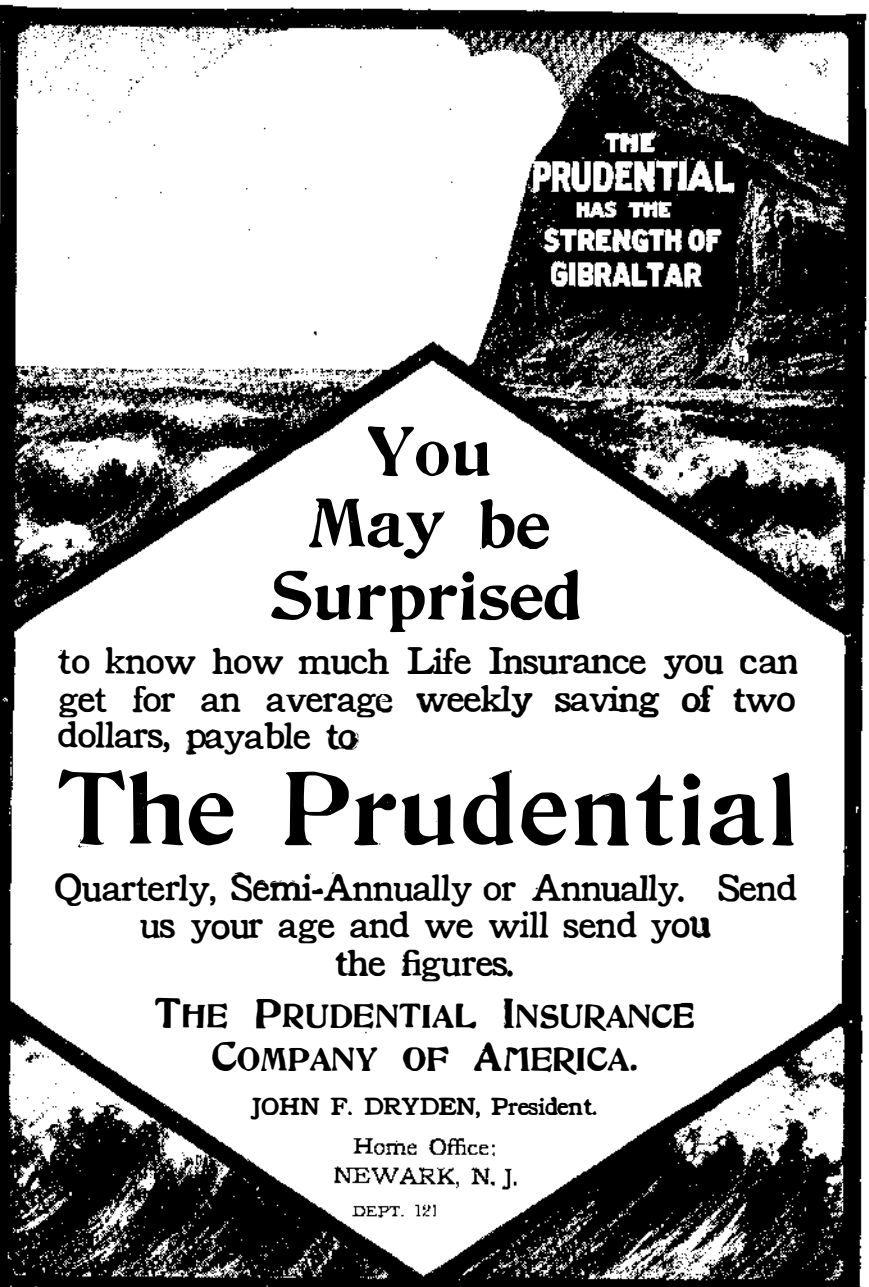
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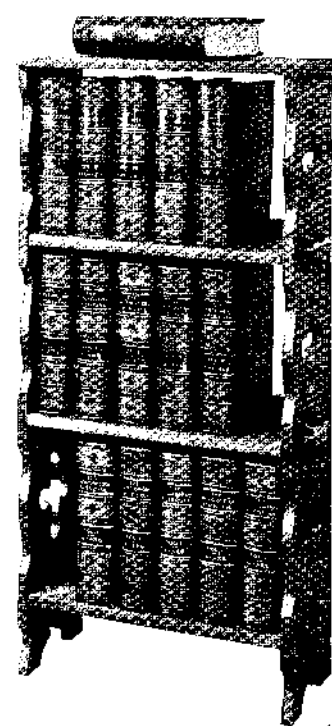
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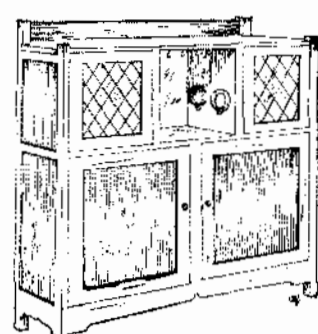
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